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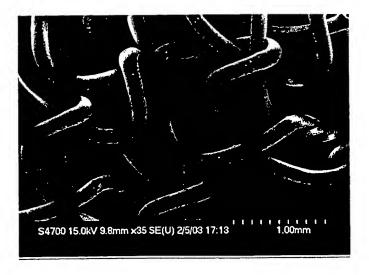
Fig. 1A



Fig. 1B



Fig. 1C



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Fig. 2A

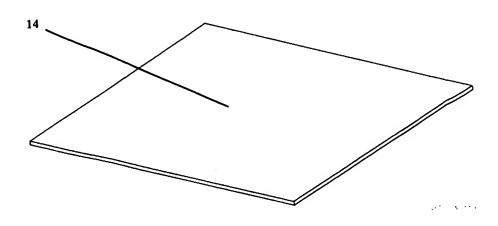


Fig. 2B

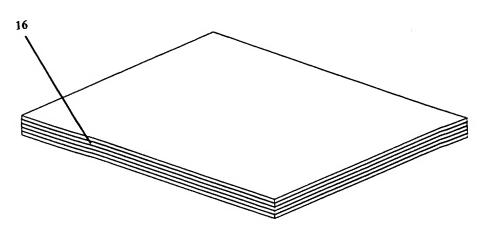
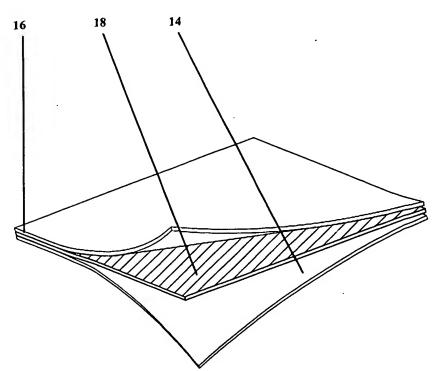


Fig. 2C



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Fig. 3A

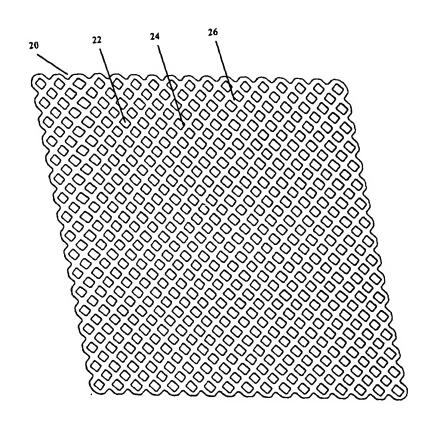
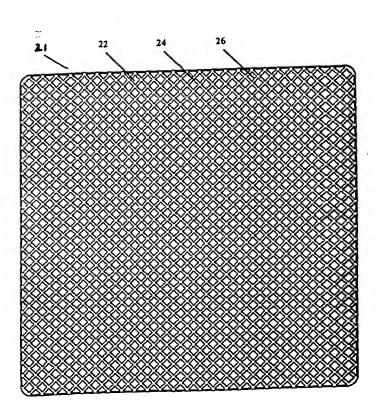


Fig. 3B



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Fig. 4A

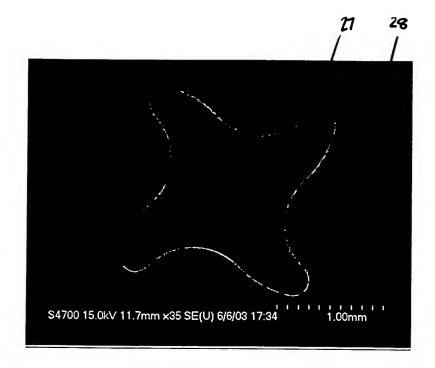
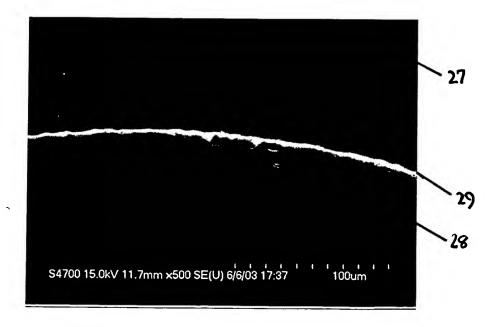


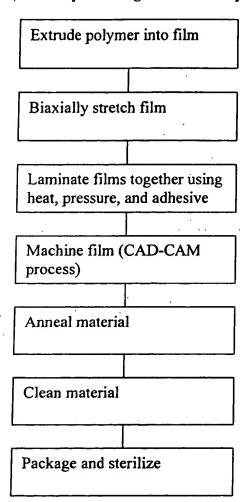
Fig. 4B



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Method for producing soft tissue implant

Fig. 5



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Fig. 6A

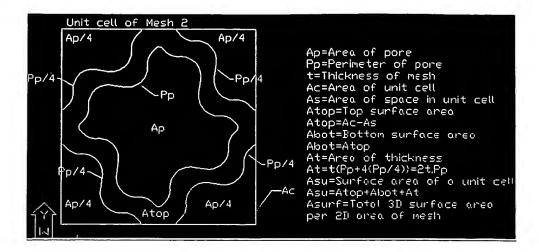


Fig. 6B

Method for Calculating Mesh2 Surface Area

Area of pore	Ap	10.89	mm2
Perimeter of pore	Pp	15.08	mm
<u>Thickness</u>	<u>t</u>	0.20	<u>mm</u>
Area of unit cell	<u>Ac</u>	31.00	mm2

Area of space in unit cell	As=Ap+4(Ap/4)=2Ap	21.78	mm2
Top surface area	Atop=Ac-As	9.22	mm2
Bottom surface area	Abot=Atop	9.22	mm2
Area of thickness	$\underline{At=t(Pp+4(Pp/4))}$	6.03	mm2

3D surface area of a unit cell	Asu=Atop+Abot+At	24.47	mm2
Surface area ratio	Asurf=Asu/Ac	0.79	

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Fig. 7A



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Fig. 7B



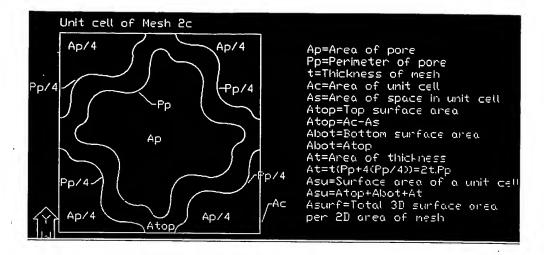
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Fig. 8A



Method for Calculating Mesh2C Surface Area

Fig. 8B

Area of pore	Ар	2.78	mm2
Perimeter of pore	<u>Pp</u>	7.83	mm
Thickness	<u>t</u>	0.20	mm
Area of unit cell	<u>Ac</u>	<u>7.75</u>	mm2

Area of space in unit cell	As=Ap+4(Ap/4)=2Ap	<u>5.56</u>	mm2
Top surface area	Atop=Ac-As	2.19	mm2
Bottom surface area	Abot=Atop	<u>2.19</u>	mm2
Area of thickness	At=t(Pp+4(Pp/4))	3.13	mm2

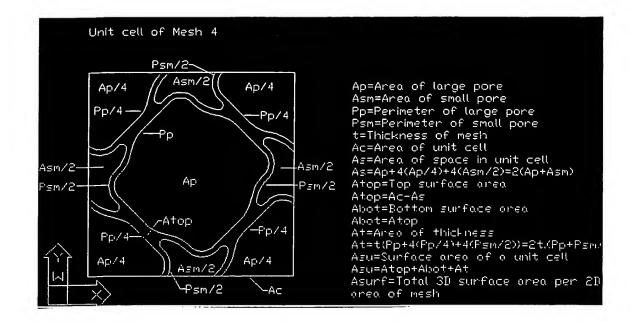
3D surface area of a unit cell	Asu=Atop+Abot+At	7.51	mm2
Surface area ratio	Asurf=Asu/Ac	0.97	

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Fig. 9A



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Fig. 9B

Method for Calculating Mesh4 Surface Area

. Area of large pore	<u>Ap</u>	11.17	mm2
Perimeter of large pore	<u>Pp</u> ·	<u>12.47</u>	<u>mm</u>
Area of small pore	<u>Asm</u>	2.20	mm2
Perimeter of small pore	<u>Psm</u>	8.09	<u>mm</u>
<u>Thickness</u>	<u>t</u>	0.20	mm
Area of unit cell	<u>Ac</u>	31.00	mm2

Area of space in unit cell	As=Ap+4(Ap/4)+4(Asm/2)=2(Ap+Asm)	<u>26.74</u>	<u>mm2</u>
Top surface area	Atop=Ac-As	<u>4.26</u>	<u>mm2</u>
Bottom surface area	Abot=Atop	4.26	mm2
Area of thickness	At=t(Pp+4(Pp/4)+4(Psm/2))=2t.(Pp+Psm)	8.22	mm2

3D surface area of a unit cell	Asu=Atop+Abot+At	<u>16.74</u>	<u>mm2</u>
3D surface area per 2D unit cell area	Asurf=Asu/Ac	<u>0.54</u>	

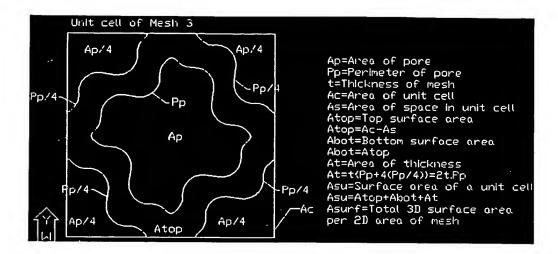
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Fig. 10A



 $Fig. \ 10B \qquad \hbox{Method for Calculating Mesh3 Surface Area}$

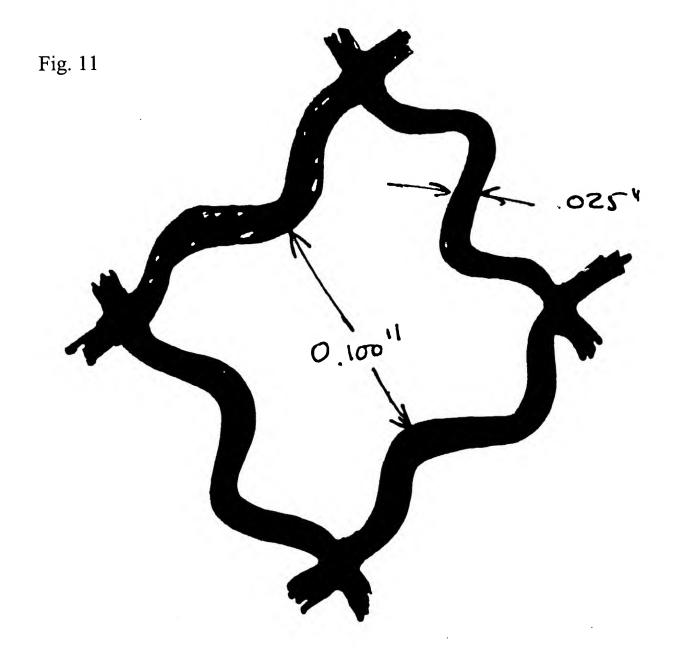
Area of pore	Ар	10.89	mm2
Perimeter of pore	Pp	15.08	mm
Thickness	t	0.20	mm
Area of unit cell	Ac	35.48	mm2

Area of space in unit cell	As=Ap+4(Ap/4)=2Ap	21.78	mm2
Top surface area	Atop=Ac-As	13.70	mm2
Bottom surface area	Abot=Atop	13.70	mm2
Area of thickness	At=t(Pp+4(Pp/4))	6.03	mm2

3D surface area of a unit cell	Asu=Atop+Abot+At	33.43	mm2
Surface area ratio	Asurf=Asu/Ac	0.94	

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Fig. 12

NEWTONS PER CENTIMETRE WIDTH VERSUS STRAIN FOR TRANSVERSE DIRECTION

